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Imagery analysis report

## **Typhoon SSBN Unit 5 Probably in Early Stage of Construction at Severodvinsk Shipyard 402, USSR (S)**

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## TYPHOON SSBN UNIT 5 PROBABLY IN EARLY STAGE OF CONSTRUCTION AT SEVERODVINSK, USSR (S)

### INTRODUCTION

1. (S/D) This report supersedes a previous NPIC report<sup>1</sup> on Typhoon SSBN construction at Severodvinsk Shipyard 402 ( ), USSR.

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2. (TSR) An analysis of nuclear-powered ballistic missile submarine (SSBN) missile bay internal-deck-level subassemblies<sup>2</sup> at Severodvinsk Shipyard 402 revealed that Typhoon SSBN unit 5 is probably in the early stage of construction. These subassemblies are only associated with the Typhoon SSBN.

3. (S/D) The subassemblies, which were present as early as ( ) (Table 1), were two deck-levels high with ( ) circular probable missile tube cutouts in the upper deck (Figure 1). These subassemblies are probably installed in the lower missile bay levels of the submarine in a very early stage of construction. The staging of subassemblies in preparation for construction of Typhoon SSBNs is an indicator of the approximate laydown dates of hulls 2 through 5. As many as seven subassemblies were in front of the fabrication buildings at the south end of the launch basin, at various locations in the staging area, and on the railspur serving construction hall 3 between ( ). The presence of this many subassemblies immediately prior to the rollout of Typhoon SSBN unit 1 in late September and the rapid decrease in the number of subassemblies after that date indicate that the four Typhoon SSBN building positions in construction hall 3 were fully occupied during early 1980.\*

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4. (TSR) Although little is known about the internal hull configuration of the Typhoon SSBN, it is believed that analysis of the subassemblies does reveal when construction was started on the hulls. Estimated start-of-construction dates for Typhoon SSBN hulls 1 through 5 are as follows:

Hull Number	Estimated Date of Start of Construction	Date of Subassembly Observations
1	Mid-to-late 1975	None
2	Mid-1977	February – September 1977
3	Mid-1978	July – December 1978
4	Late 1978 – early 1979	January – June 1979
5	October 1980	May – December 1980

\*Two buildingways for the construction of Typhoon SSBNs are available in construction hall 3, as evidenced by the launch rails exiting the hall. Buildingway 1 (where the Oscar SSGN was constructed) is supported by a two-launch-rail system. Buildingways 2 and 3 are supported by a six-launch-rail system capable of handling the larger Typhoon SSBN. The length of each of the buildingways is sufficient to handle the construction of two Typhoon SSBNs in a tandem arrangement, for a total of four building positions.

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### **TYPHOON SSBN UNIT 1**

5. (TSR) Typhoon SSBN unit 1 (launched between [ ] was probably laid down during the last half of 1975 after the completion of construction hall 3. Activity supporting this judgment included the movement of the crated hull sections adjacent to construction hall 2, road improvements between construction hall 2 and the back doors of construction hall 3, and the arrival of the rubber-tired hull section transporter. All of this activity took place between April and June 1975.<sup>2</sup> Since no subassemblies were identified for unit 1, it is postulated that they were constructed piece by piece directly on the submarine inside construction hall 3.

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**TYPHOON SSBN UNIT 2**

6. (TSR) Construction of Typhoon SSBN unit 2 was probably started in mid-1977. The subassemblies identified in 1977 (Table 1) and the two- and four-hole plates identified in September and October 1977<sup>2</sup> were probably inserted into hull 2 in its early stage of construction, although it is possible that these components were for unit 1 and not unit 2. It is considered likely that Typhoon construction would have begun when construction hall 3 was completed in 1975. Additionally, the building where the subassemblies are fabricated has not been identified. It is possible that fabrication of the subassemblies as complete components did not begin until after fabrication building 2 was completed in mid-1976. The observation of the first subassembly on [ ] (believed to be for Typhoon SSBN unit 2) may indicate the first operational use of fabrication building 2.

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**TYPHOON SSBN UNITS 3 AND 4**

7. (TSR) The start of construction of Typhoon SSBN unit 3 in mid-1978 and unit 4 in late 1978 or early 1979 is indicated by the observations of subassemblies from July through December 1978 and January through June 1979 (Table 1). This activity was concurrent with the slowdown of Delta-series SSBN construction in construction hall 1 and suggested that Typhoon SSBNs were in full series production. With the slowdown of Delta-series construction, additional shipyard workers would probably be available for the Typhoon SSBN program, especially those required for basic hull construction.

**TYPHOON SSBN UNIT 5**

8. (TSR). The large numbers of subassemblies observed between late May and mid-September 1980 indicate that staging of components was underway in preparation for the start of construction of Typhoon SSBN unit 5 immediately after the launch of hull 1 in late September. Staging of subassemblies prior to the launch of unit 1 and the rapid decrease in their numbers between late September and the end of December further indicate that the four Typhoon SSBN building positions in construction hall 3 were occupied by units 1 through 4 and that construction of unit 5 could not begin until after unit 1 was launched. Future staging of subassemblies could possibly be used as an early indicator of an upcoming Typhoon SSBN launch.

**DOCUMENTS**

1. NPIC. [ ] *Typhoon SSBN Unit 5 Probably in Early Stage of Construction at Severodvinsk Shipyard 402, USSR (S)*, Mar 81 (TOP SECRET [ ]) 25X1
2. NPIC. [ ] *Typhoon SSBN Construction at Severodvinsk Shipyard 402, USSR (TSR)*, Jan 80 (TOP SECRET [ ]) 25X1

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(S) Comments and queries regarding this report are welcome. They may be directed to [ ] Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC, [ ]

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